Population and Dwelling Unit

PROJECTIONS

for Ottawa-Carleton and subareas, 1986-2011

Policy and Programs Division
Planning Department
Regional Municipality of Ottawa-Carleton
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Introduction

The estimates of the distribution of population and households in this report are based on regional projections released in April 1990. The estimates are based on progress being made towards the achievement of the regional development strategy in the Official Plan, the main components of which are;

- full development of lands inside the greenbelt
- 3 approximately equal sized urban centres outside the greenbelt

Growth figures presented here are made within the context of the approved Regional Official Plan as of August 1990. Subsequent amendments to the Plan may result in changes to the distribution of population and dwelling units, particularly in the 2001-2011 period.

The estimates were prepared as the basis for assessing regional infrastructure requirements (water, sewer, road and transitway) which in turn will be used in a study of Ottawa-Carleton's financing requirements and potential regional development charges. The estimates were prepared in consultation with staff of the area municipalities and school boards, whose contribution is gratefully acknowledged.

Methodology

In order to project occupied dwelling units and population the methodology includes the following steps:

- Establish Ottawa-Carleton population[1] and household[2] projections
- Distribute occupied dwelling units by type by subarea and municipality based on residential land surveys, [3]current development proposals, estimated redevelopment potential, and review with staff of area municipalities and school boards of forecasts that they had prepared.
- Adjust population generated by subarea and municipality based on anticipated population generation by unit type (see also "general notes" at end of report).

These projections are summarized in Table 1.

It may be noted that projections for 1990 and 1991 are slightly above those published in April 1990. Projections contained herein for 1990-91 are based on actual housing completions since 1986 which imply slightly higher growth than the published "reference" scenario (by about 4,000 persons). Projected growth rates for 1991-96 have been adjusted to bring totals in line with the reference scenario by 1996.

In order to estimate total construction during the period 1990- 2011 adjustments must be made for collective dwellings, dwelling units used by the non-permanent population, demolitions and con-

1 Regional Municipality of Ottawa-Carleton, "1990 Update, Population Projections Ottawa-Carleton 1986-2011", April 1990.
2 Regional Municipality of Ottawa-Carleton, "Update Report 1990, Household and Housing Projections, 1986-2001, April 1990.
3 Regional Municipality of Ottawa-Carleton, "Vacant Urban Residential Land Survey ", annually.

5/10/90

TABLE 1. SUB-REGIONAL PROJECTIONS: 1986 - 2011

AREA	CENSUS POPULATION						OCCUPIED DWELLING UNITS					
	1986	1990	1991	1996	2001	2011	1986	1990	1991	1996	2001	2011
OTTAWA	300763	305470	306270	309000	310700	311100	128615	136929	138356	145500	151300	164700
VANIER	18428	18430	18490	18700	18900	19500	8325	8582	8683	9200	9700	10700
ROCKCLIFFE	2033	2060	2070	2100	2100	2200	635	672	679	700	700	900
NEPEAN, inside Grnblt	78972	82310	83060	86000	83300	80600	26900	29548	29861	31400	32100	33200
NEPEAN, S.U.C	13202	19890	20710	36300	51200	65100	3980	6180	6426	11400	16600	22000
NEPEAN, rural	3316	3270	3280	3300	3400	3400	950	990	998	1000	1100	1200
NEPEAN, Total	95490	105470	107050	125600	137900	149100	31830	36718	37284	43800	49800	56400
GLOUC, inside Grnblt	55759	55300	55450	56000	54900	54700	17885	18616	18746	19400	20000	21700
GLOUC, Orleans	28151	36830	37390	39900	41700	44200	8315	11245	11445	12600	13800	15500
GLOUC, S.U.C	685	840	870	1000	4000	22800	228	288	296	300	1300	7200
GLOUC, Leitrim	333	330	330	2700	5500	9500	106	106	106	900	1800	3100
GLOUC, rural	4881	4840	4830	4800	4700	4700	1491	1531	1539	1600	1600	1700
GLOUC, Total	89809	98140	98870	104400	110800	135900	28025	31786	32132	34800	38500	49200
KANATA, W.U.C	25985	33330	35230	42700	53600	72800	7875	10439	11054	14100	17700	24800
KANATA, rural	1535	1920	2020	2400	2900	3700	485	625	659	800	1000	1300
KANATA, Total	27520	35250	37250	45100	56500	76500	8360	11064	11713	14900	18700	26100
CUMBERLAND, Orleans	18468	28870	31380	41300	53800	74800	5325	8504	9273	13100	16800	24500
CUMBERLAND, rural	8531	9640	9960	11200	12600	15200	2570	2990	3101	3700	4200	5200
CUMB., Total	26999	38510	41340	52500	66200	90000	7895	11494	12374	16800	21000	29700
STITTSVILLE	5022	7430	8010	10300	12900	16500	1687	2539	2744	3800	4600	6000
GOULBOURN, rural	7281	7990	8210	9100	9800	11300	2248	2548	2624	3000	3300	4000
GOULBOURN, Total	12303	15420	16220	19400	22700	27800	3935	5087	5368	6800	7900	10000
RIDEAU	10271	11460	11590	12100	12000	13800	3225	3684	3738	4000	4200	5000
OSGOODE	11197	13260	13820	16100	18600	23100	3495	4236	4431	5400	6300	8000
W. CARLETON	11828	13830	14340	16400	18400	22500	3800	4545	4725	5600	6500	8000
RMOC TOTAL	606639	657300	667310	721000	774000	871000	228140	254800	259500	287600	314500	368400
SUB-TOTALS:												
ORLEANS	46619	65700	68770	81200	95300	119000	13640	19749	20718	25700	30600	40000
S.U.C.	13887	20730	21580	37300	55200	87900	4208	6468	6722	11700	17900	29200
W.U.C + STITTSVILLE	31007	40760	43240	53000	66500	89300	9562	12978	13798	17900	22300	30800
INSIDE GREENBELT	455953	463570	465340	471800	469800	468100	182360	194346	196324	206200	213800	231100
URBAN CENTRES	91846	127520	133920	174200	222500	305600	27516	39301	41344	56200	72500	103000
RURAL	58840	66210	68050	75400	82300	97700	18264	21150	21816	25100	28200	34300
CARLETON SCHOOL BOARDS AREA:	285417	331340	340480	391200	442300	538200	90585	108618	111783	132200	152800	192100
% SHARE OF REGION:												
INSIDE GREENBELT	75.2	70.5	69.7	65.4	60.7	53.7	79.9	76.3	75.7	71.7	68.0	62.7
URBAN CENTRES	15.1	19.4	20.1	24.2	28.7	35.1	12.1	15.4	15.9	19.5	23.1	28.0
RURAL	9.7	10.1	10.2	10.5	10.6	11.2	8.0	8.3	8.4	8.7	9.0	9.3

NOTES:

1. All figures are mid-year (June 1).
2. 1986-90 increase in units by municipality is based on CMHC completions adjusted for demolitions and vacancies.
3. "Census Population" excludes non-permanent residents (eg. students, foreign diplomats, members of parliament). The City of Ottawa estimates there were 19,295 non-permanent residents in 1986. Estimates for other municipalities are not available.

versions, and for providing an allowance for a vacancy rate. These adjustments are explained in the following sections.

Collective Dwellings

Collective dwellings are comprised of institutional uses, such as nursing homes, prisons, and other residential (i.e. live-in) care facilities, where residents share meals and/or kitchen and bath facilities. Also included are rooming houses.

Projections of collectives are difficult, partly because it is difficult to separate them from the mass of private dwellings, and partly because of the difficulty of predicting private and public expenditures on this form of residence, when alternatives are available and choice is increasing.

The household projections report (1990 Update) noted that the forces affecting the future of collectives were pulling in both directions. On the one hand, government provision of long-term care facilities for the elderly was seen as decreasing in favour of services to allow the elderly to maintain their own households as long as possible. Counteracting this is increased private sector activity to provide collective care for the elderly, plus an increase in other forms of collectives such as group homes. For purposes of this study it is assumed that collectives will maintain their share of total housing.

In 1986 (Census) 15,150 persons lived outside of "private households". Assuming that almost all of these inhabited collectives of one form or another, 15,150/1.1 = 13,773 "rooms" or "units" are assumed to have existed in RMOC in 1986. The rate of increase is assumed to be proportional to the increase in other units (+61% 1986-2011). Therefore about an extra 8,400 "rooms" would be added for a total of 22,173 rooms in 2011.

Distribution across the region is assumed to be proportional to distribution of apartment construction.

Dwelling Units for Non-permanent Population

Detailed estimates are available only for the City of Ottawa. Population figures were converted to dwelling units on the following basis:

Ottawa has estimated this population to grow by 0.4%/year (= 309 additional units by 2011).

For Rockcliffe, the difference between assessed

Table 2
Dwelling Units for Ottawa Non-Permanent Population

Category	1986 Population	Persons per unit	# of units
Diplomats (assumes some are here without families)	3,785	2.5	1,514
Military Personnel (assumes most are on their own)	100	1.5	67
Parliamentary	540	2.6	208
Students:			
(Carleton, Ottawa U.)	10,968	10% of students	1,097
(Algonquin, St. Paul's)	3,991	5% of students	200
Total	**19,275**		**3,086**

1986 units and 1986 Census occupied units was assumed to be occupied by diplomats and other non-permanent residents (= 88 units).

Other than Ottawa and Rockcliffe, it was assumed that only Gloucester and Nepean would have any significant non-permanent component.

Assuming that 90% are in Ottawa and Rockcliffe, 10% x (88 + 3,086) = 318 units.

These were assumed to be split equally between Gloucester and Nepean = 159 units each.

Based on the above, total units occupied by non-permanent residents are estimated to be :

Ottawa	3,086
Rockcliffe	88
Gloucester	159
Nepean	159
Total	4,493

At 0.4% increase/yr = 452 units added by 2011.

Demolitions and Conversions

Figures in Table 3 are based on demolition permit data from area municipal staff, generally for 1986-89, but longer in some cases. Numbers for Cumberland and the three rural townships are estimated.

Figures for Ottawa and Vanier include both demolitions and conversions. For Ottawa, numbers are based on demolitions for 1989 only. Conversions for 1986-88 inclusive were based on Rental Housing Protection Act approvals (average -7 units/yr)

Table 3
Average Annual Demolitions & Conversions

Ottawa	121	Dwelling Units
Vanier	5	
Rockcliffe	0	
Nepean	15	
Gloucester	23	
Kanata	4	
Cumberland	5	
Goulbourn	3	
Rideau	2	
Osgoode	2	
West Carleton	2	
Total RMOC	**182 units/year**	

Vacancies

Table 4 assumes a 1% vacancy rate in every municipality. The CMHC Oct 1989 survey showed a 1.3% apartment vacancy rate, and the April 1990 survey reported 1.9% vacancy. Given an assumed zero vacancy rate in buildings with less than 6 units, an average of 1% appears reasonable in the longer term. One per cent is assumed in singles and multiples elsewhere.

However it should be noted that before rent control was introduced and vacancy rates fell, a rate of 3%-4% was considered sufficient to allow the market to function. The Regional Official Plan establishes a 3% vacancy rate for rental units before conversions to a condominium form of tenure for an existing rental building would be permitted. If a 3% vacancy rate were to be attained in 2011, the total additional units required would be 11,046.

TABLE 4. ESTIMATED VACANT UNITS (assuming 1% vacancy rate)

	TOTAL VACANT UNITS					UNITS/YEAR			
AREA	1986	1991	1996	2001	2011	1986-1991	1991-1996	1996-2001	2001-2011
OTTAWA	1286	1382	1454	1511	1643	257	276	291	302
VANIER	83	87	92	96	107	17	17	18	19
ROCKCLIFFE	6	7	7	7	9	1	1	1	1
NEPEAN, inside Grnbl	269	299	316	323	334	54	60	63	65
NEPEAN, S.U.C	40	69	107	158	220	8	14	21	32
NEPEAN, rural	10	10	10	11	12	2	2	2	2
NEPEAN, Total	318	377	433	491	565	64	75	87	98
GLOUC, inside Grnblt	179	188	197	202	219	36	38	39	40
GLOUC, Orleans	83	115	131	143	158	17	23	26	29
GLOUC, S.U.C	2	3	4	13	72	0	1	1	3
GLOUC, Leitrim	1	3	12	21	32	0	1	2	4
GLOUC, rural	15	15	16	16	17	3	3	3	3
GLOUC, Total	280	324	359	396	498	56	65	72	79
KANATA, W.U.C	79	110	141	172	243	16	22	28	34
KANATA, rural	5	7	8	10	13	1	1	2	2
KANATA, Total	84	117	150	182	256	17	23	30	36
CUMBERLAND, Orlea	53	92	13	167	242	11	18	26	33
CUMBERLAND, rural	26	31	37	42	52	5	6	7	8
CUMB., Total	79	123	167	210	295	16	25	33	42
STITTSVILLE	17	27	38	47	60	3	5	8	9
GOULBOURN, rural	22	26	30	34	40	4	5	6	7
GOULBOURN, Total	39	54	68	81	100	8	11	14	16
RIDEAU	32	37	40	42	50	6	7	8	8
OSGOODE	35	44	54	63	80	7	9	11	13
W. CARLETON	38	47	56	64	80	8	9	11	13
RMOC TOTAL	2281	2599	2879	3143	3682	456	520	576	629
SUB-TOTALS:									
ORLEANS	136	207	261	310	400	27	41	52	62
S.U.C.	42	72	111	171	292	8	14	22	34
W.U.C + STITTSVILLE	96	137	179	219	303	19	27	36	44
INSIDE GREENBELT	1824	1962	2066	2140	2312	365	392	413	428
URBAN CENTRES	275	419	563	721	1027	55	84	113	144
RURAL	183	218	251	282	342	37	44	50	56
CARLETON SCHOOL BOARDS AREA:	906	1123	1326	1529	1923	181	225	265	306

Summary

Table 5 summarizes the region-wide total number of units in 2011.

Table 5
Total Ottawa-Carleton Dwelling Units 2011

368,200	"occupied dwelling units"
4,945	non-permanent residents' units
3,682	for 1% vacancy
4,550	demolition/conversion replacement
13,177	Sub-total
381,377	Total - not counting "collective" (22,200 "rooms" in 2011)

General Notes

- 1986-2011 projections are based on revised projections for RMOC.
- household projections for 2011 used 2011 population times 2001 household propensity by age group (published household projections stopped at 2001).
- for each time period, the regional total increase in singles, multiples and apartments was calculated. These were distributed by unit type among sub-areas based on vacant land inventory, known development plans, past trends and redevelopment potential (if any), plus judged market demand in consultation with local planning staff. Population is derived from number of units times projected household size.

APPENDIX

TABLE A – 1
CONSTRUCTION RATE & HOUSEHOLD SIZE ASSUMPTIONS: 1986 – 2011

	NET ADDITIONAL UNITS/YEAR				AVERAGE HOUSEHOLD SIZE				
AREA	1986-1991	1991-1996	1996-2001	2001-2011	1986	1991	1996	2001	2011
OTTAWA	1948	1427	1164	1336	2.34	2.21	2.14	2.05	1.89
VANIER	72	101	93	104	2.21	2.13	2.06	1.96	1.82
ROCKCLIFFE	9	7	0	15	3.20	3.05	2.98	2.88	2.53
NEPEAN, inside Grnblt	592	313	138	110	2.94	2.78	2.76	2.59	2.43
NEPEAN, S.U.C	489	1002	1026	544	3.32	3.22	3.24	3.09	2.96
NEPEAN, rural	10	8	8	7	3.49	3.28	3.19	3.11	2.94
NEPEAN, Total	1091	1323	1172	661	3.00	2.88	2.90	2.77	2.64
GLOUC, inside Grnblt	172	130	114	173	3.12	2.96	2.91	2.75	2.52
GLOUC, Orleans	626	220	248	176	3.39	3.27	3.23	3.03	2.84
GLOUC, S.U.C	14	8	185	590	3.00	2.95	3.05	3.19	3.18
GLOUC, Leitrim	0	150	185	128	3.14	3.12	3.12	3.09	3.09
GLOUC, rural	10	9	8	7	3.27	3.14	3.06	2.92	2.75
GLOUC, Total	821	517	740	1074	3.20	3.08	3.07	2.89	2.76
KANATA, W.U.C	636	615	715	705	3.30	3.19	3.16	3.03	2.94
KANATA, rural	35	34	33	29	3.16	3.07	3.04	2.92	2.90
KANATA, Total	671	649	748	734	3.29	3.18	3.17	3.02	2.94
CUMBERLAND, Orleans	790	769	740	768	3.47	3.38	3.34	3.19	3.05
CUMBERLAND, rural	106	111	105	100	3.32	3.21	3.16	3.01	2.93
CUMB., Total	896	880	845	868	3.42	3.34	3.30	3.15	3.03
STITTSVILLE	211	205	163	139	2.98	2.92	2.88	2.81	2.76
GOULBOURN, rural	75	76	66	65	3.24	3.13	3.09	2.93	2.85
GOULBOURN, Total	287	281	229	204	3.13	3.02	2.98	2.86	2.79
RIDEAU	103	54	40	75	3.18	3.10	3.06	2.84	2.78
OSGOODE	187	195	185	168	3.20	3.12	3.08	2.93	2.88
W. CARLETON	185	180	165	156	3.11	3.04	3.00	2.85	2.81
RMOC TOTAL	6272	5614	5381	5394	2.66	2.57	2.51	2.46	2.37
SUB-TOTALS:									
ORLEANS	1416	1190	980	940	3.42	3.32	3.16	3.11	2.98
S.U.C.	503	1046	1240	1130	3.30	3.21	3.19	3.08	3.01
W.U.C + STITTSVILLE	847	820	878	844	3.24	3.13	2.96	2.98	2.90
INSIDE GREENBELT	2793	1975	1520	1730	2.50	2.37	2.29	2.20	2.03
URBAN CENTRES	2766	2971	3260	3050	3.34	3.24	3.10	3.07	2.97
RURAL	710	657	620	610	3.22	3.12	2.99	2.92	2.85
CARLETON SCHOOL BOARDS AREA:	4244	4079	4124	3939	3.05	3.05	2.96	2.89	2.80